WE CLAIM:

1. A method for forming a film comprising the steps of:

placing a substrate in a reaction chamber;

introducing a reactive gas into said reaction chamber;

inputting an energy for activating said reactive gas; and

depositing a silicon-containing compound on said substrate,

wherein said reactive gas comprises tetra-ethyloxy-silane.

- 2. The method of claim 1 wherein said energy is an electromagnetic energy.
- 3. The method of claim 1 wherein said energy is a photo energy.
- 4. The method of claim 1 wherein said silicon compound is silicon oxide
- 5. The method of claim 1 further comprising the steps of:

taking out said substrate from the reaction chamber after depositing said compound thereon;

introducing an etchant gas into said reaction chamber;

inputting an electromagnetic energy to said etchant gas so that said etchant gas is activated; and

etching said compound formed on an inside surface of said reaction chamber.

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comprises NF₃.

The method of claim wherein said etchant gas

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